

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Previously Presented) A computer-implemented method for providing predictive information to a human user during the course of conducting an unbroken online interactive session between the human user and a customer, during which interactive session the human user uses an application computing system comprising one or more software applications that run in a computing environment, the application computing system connected to communicate with a prediction computing engine, the computer-implemented method comprising:

 during the course of the interactive session between the human user and the customer, the application computing system sending a first electronic request to the prediction computing engine to perform a first prediction determination of a probability that the customer will take a predefined action, the first electronic request including a first input value set including information that was provided by the customer during the interactive session;

 in response to the first electronic request, the prediction computing engine using the first input value set to perform the first prediction determination, electronically storing first state information generated as part of the first prediction determination, providing to the application computing system a first prediction result of the first prediction determination, and displaying during the course of the interactive session the first prediction result on a display device to the human user;

 at a later point in time during the interactive session between the human user and the customer when additional information about the customer becomes available, the additional information being provided by the customer during the interactive session, the application computing system sending a second electronic request to the prediction computing engine to

perform a second prediction determination of a probability that the customer will take the predefined action, the second electronic request including a second input value set comprising at least information derived from the additional information about the customer that became available at the application system after the sending of the first request; and

in response to the second request and during the interactive session, the prediction computing engine performing the second prediction determination using both of the stored first state information generated as part of the first prediction determination and the second input value set derived from the additional information about the customer that became available at the application system after the sending of the first request, the first state information being used to avoid calculations being performed in the second prediction determination that would duplicate calculations that were already performed in the first prediction determination, providing to the application computing system a second prediction result of the second prediction determination, and displaying during the course of the interactive session the second prediction result on a display device to the human user.

2. (Canceled)

3. (Previously Presented) The computer-implemented method of claim 1, wherein the second input value set includes both the first input value set and an additional set of input values, and wherein the method comprises using a decision tree along with the stored state information and the additional set of input values to compute the second prediction result.

4. (Canceled)

5. (Previously Presented) The computer-implemented method of claim 1, wherein the first input value set includes at least two input values.

6. (Previously Presented) The computer-implemented method of claim 1, wherein the second input value set includes at least two input values.

7-10. (Canceled)

11. (Previously Presented) The computer-implemented method of claim 1, wherein the first state information includes intermediate probability information.

12. (Original) The computer-implemented method of claim 1, wherein the first and second prediction results each specify a probability of customer churn.

13-31. (Canceled)

32. (Previously Presented) The computer-implemented method of claim 1, wherein the second input value set is provided to the application computing system by the human user as a result of interaction by the human user with the customer.

33. (Previously Presented) A computer-readable storage medium comprising computer-executable instructions that when executed perform a computer-implemented method for providing predictive information to a human user during the course of conducting an unbroken online interactive session between the human user and a customer, during which interactive session the human user uses an application computing system comprising one or more software applications that run in a computing environment, the application computing system connected to communicate with a prediction computing engine, the computer-implemented method comprising:

during the course of the interactive session between the human user and the customer, the application computing system sending a first electronic request to the prediction computing engine to perform a first prediction determination of a probability that the customer will take a

predefined action, the first electronic request including a first input value set including information that was provided by the customer during the interactive session;

in response to the first electronic request, the prediction computing engine using the first input value set to perform the first prediction determination, electronically storing first state information generated as part of the first prediction determination, providing to the application computing system a first prediction result of the first prediction determination, and displaying during the course of the interactive session the first prediction result on a display device to the human user;

at a later point in time during the interactive session between the human user and the customer when additional information about the customer becomes available, the additional information being provided by the customer during the interactive session, the application computing system sending a second electronic request to the prediction computing engine to perform a second prediction determination of a probability that the customer will take the predefined action, the second electronic request including a second input value set comprising at least information derived from the additional information about the customer that became available at the application system after the sending of the first request; and

in response to the second request and during the interactive session, the prediction computing engine performing the second prediction determination using both of the stored first state information generated as part of the first prediction determination and the second input value set derived from the additional information about the customer that became available at the application system after the sending of the first request, the first state information being used to avoid calculations being performed in the second prediction determination that would duplicate calculations that were already performed in the first prediction determination, providing to the application computing system a second prediction result of the second prediction determination, and displaying during the course of the interactive session the second prediction result on a display device to the human user.

34. (Previously Presented) The computer-readable storage medium of claim 33, wherein the second input value set includes both the first input value set and an additional set of input values, and wherein the method comprises using a decision tree along with the stored state information and the additional set of input values to compute the second prediction result.

35. (Previously Presented) The computer-readable storage medium of claim 33, wherein the first input value set includes at least two input values.

36. (Previously Presented) The computer-readable storage medium of claim 33, wherein the second input value set includes at least two input values.

37. (Previously Presented) The computer-readable storage medium of claim 33, wherein the first state information includes intermediate probability information.

38. (Previously Presented) The computer-readable storage medium of claim 33, wherein the first and second prediction results each specify a probability of customer churn.

39. (Previously Presented) The computer-readable storage medium of claim 33, wherein the second input value set is provided to the application computing system by the human user as a result of interaction by the human user with the customer.

40. (New) A system comprising:
one or more processors; and
a computer-readable medium including instructions that, when executed by the one or more processors, causes the one or more processors to perform operations for providing predictive information to a human user during the course of conducting an unbroken online interactive session between the human user and a customer, during which interactive session the human user uses an application computing system comprising one or more software applications

that run in a computing environment, the application computing system connected to communicate with a prediction computing engine, the operations comprising:

during the course of the interactive session between the human user and the customer, the application computing system sending a first electronic request to the prediction computing engine to perform a first prediction determination of a probability that the customer will take a predefined action, the first electronic request including a first input value set including information that was provided by the customer during the interactive session;

in response to the first electronic request, the prediction computing engine using the first input value set to perform the first prediction determination, electronically storing first state information generated as part of the first prediction determination, providing to the application computing system a first prediction result of the first prediction determination, and displaying during the course of the interactive session the first prediction result on a display device to the human user;

at a later point in time during the interactive session between the human user and the customer when additional information about the customer becomes available, the additional information being provided by the customer during the interactive session, the application computing system sending a second electronic request to the prediction computing engine to perform a second prediction determination of a probability that the customer will take the predefined action, the second electronic request including a second input value set comprising at least information derived from the additional information about the customer that became available at the application system after the sending of the first request; and

in response to the second request and during the interactive session, the prediction computing engine performing the second prediction determination using both of the stored first state information generated as part of the first prediction determination and the second input value set derived from the additional information about the customer that became available at the application system after the sending of the first request, the first state information being used to avoid calculations being performed in the second prediction determination that would duplicate calculations that were already performed in the first prediction determination, providing to the

application computing system a second prediction result of the second prediction determination, and displaying during the course of the interactive session the second prediction result on a display device to the human user.

41. (New) The system of claim 40, wherein the second input value set includes both the first input value set and an additional set of input values, and wherein the operations comprise using a decision tree along with the stored state information and the additional set of input values to compute the second prediction result.

42. (New) The system of claim 40, wherein the first input value set includes at least two input values.

43. (New) The system of claim 40, wherein the second input value set includes at least two input values.

44. (New) The system of claim 40, wherein the first state information includes intermediate probability information.

45. (New) The system of claim 40, wherein the first and second prediction results each specify a probability of customer churn.

46. (New) The system of claim 40, wherein the second input value set is provided to the application computing system by the human user as a result of interaction by the human user with the customer.